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09/941,386	08/28/2001	James C. Ori	705558US1	5998

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EXAMINER

GUTMAN, HILARY L

ART UNIT

PAPER NUMBER

3612

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/941,386

Applicant(s)

ORI ET AL.

Examiner

Hilary Gutman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4-13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Handwritten signature/initials

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 2, 8, 13, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroeder et al. in view of DE '903.

Schroeder et al. (6,296,301) disclose a motor vehicle frame assembly having a first tubular frame member 20, 24, and a structural member 92 disposed in the first tubular frame member, the structural member comprising: a generally tubular body having an outer perimeter parallel to and abutting an inner perimeter of the first tubular frame member, the tubular body being disposed within the first tubular frame member to increase the moment of inertia of the first tubular frame member; wherein the frame assembly further includes a second tubular frame

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member intersecting the first tubular frame member to form a joint and the structural member is located in the first tubular frame member at the joint.

With regard to claim 8, wherein the structural member is fixedly attached to the first tubular frame member upon heating.

Schroeder et al. lack at least one rib disposed in the tubular body.

DE '903 teaches a motor vehicle frame assembly (Figures 1-3) having a first tubular frame member 20, and a structural member 1 disposed in the first tubular frame member, the structural member comprising: a generally tubular body 2 (Figures 1 and 3) having an outer perimeter complementary to an inner perimeter of the first tubular frame member (Figure 3), the tubular body being disposed within the first tubular frame member to increase the moment of inertia of the first tubular frame member; and at least one rib 3, 3' disposed in the tubular body and spanning an interior void of the tubular body; wherein the frame assembly further includes a second tubular frame member, such as the B pillar (not numbered, seen in Figure 2) intersecting the first tubular frame member to form a joint and the structural member is located in the first tubular frame member at the joint.

With regard to claim 15, the rib is orientated generally vertically.

With regard to claim 16, the at least one rib comprises multiple ribs orientated in an intersecting pattern.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the rib in the tubular body of Schroeder et al. to span an interior void of the tubular body as taught by DE '903 in order to provide better impact absorption and rigidity to the structural member and thus to the first tubular frame member.

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With regard to claim 13, the tubular body has a length and the rib extends the length of the tubular body.

4. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroeder et al. in view of DE '903.

For claim 17, Schroeder et al. '301 disclose a motor vehicle frame assembly having first and second elongate frame members 20, 24 and a reinforcing member 92, the reinforcing member comprising: a tube having an outer perimeter closely conforming to an inner perimeter of a tubular portion of the first frame member; and wherein the first and second frame members are connected at a joint and the reinforcing member is disposed in the first frame member at the joint.

Schroeder et al. lack a reinforcement structure spanning an interior void of the tube.

DE '903 teaches a motor vehicle frame assembly (Figures 1-3) having a first tubular frame member 20, and a structural member 1 disposed in the first tubular frame member, the structural member comprising: a generally tubular body 2 (Figures 1 and 3) having an outer perimeter complementary to an inner perimeter of the first tubular frame member (Figure 3), the tubular body being disposed within the first tubular frame member to increase the moment of inertia of the first tubular frame member; and at least one rib 3, 3' disposed in the tubular body and spanning an interior void of the tubular body; wherein the frame assembly further includes a second tubular frame member, such as the B pillar (not numbered, seen in Figure 2) intersecting the first tubular frame member to form a joint and the structural member is located in the first tubular frame member at the joint.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the rib in the tubular body of Schroeder et al. to span an interior void of the tubular body as taught by DE '903 in order to provide better impact absorption and rigidity to the structural member and thus to the first tubular frame member.

With regard to claim 18, the reinforcement structure comprises a longitudinal rib.

With regard to claim 19, the second frame member is tubular and the joint occurs at a central portion of the first frame member, the reinforcing member extending within the first frame member through the joint.

With regard to claim 20, the reinforcing member is fully enclosed by the first frame member.

5. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroeder et al., as modified, and as applied to claim 2 above, and further in view of Aloe et al.

Schroder et al., as modified, lack the structural member being constructed of aluminum or steel.

Aloe et al. teach (Column 1, lines 21-26) the use of steel as well as aluminum for motor vehicle structures such as frame assemblies since this material has a high rigidity and strength.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the structural member of Schroder et al., as modified, to be made of steel or aluminum as taught by Aloe et al. in order to provide additional strength and rigidity to the vehicle frame assembly of Schroder et al., as modified.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schroder et al., as modified, and as applied to claim 8 above, and further in view of Benedyk (5,458,393).

Schroder et al., as modified, lack the structural member being fixedly attached by an interference fit.

Benedyk teaches fixedly attaching structural members or frame members together by an interference fit (Col 3, lines 27-34 and 56-64; Col 8, lines 20-24; and Col 11, lines 12-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have fixedly attached the structural and first tubular frame members of Schroder et al., as modified, by an interference fit as taught by Benedyk in order to better and more securely attach the two components.

7. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroder et al., as modified, and as applied to claim 8 above, and further in view of Janotik (5,209,541).

Schroder et al., as modified, lack the structural member being fixedly attached by adhesive, fasteners, and external depressions.

Janotik teaches fixedly attaching two frame members 24, 42 by adhesive, fasteners 82, as well as by external depressions 72 (Figure 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided external depressions as taught by Janotik in the structural member of Schroder et al., as modified, and to have provided adhesive, fasteners, or external depressions as taught by Janotik in the first tubular frame member of Schroder et al., as modified, in order to better and more securely attach the two components.

Response to Arguments

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hilary Gutman whose telephone number is 703-305-0496.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 703-308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


11. **Any response to this action should be mailed to:**

Assistant Commissioner for Patents
Washington, D.C. 20231

or faxed to:

(703) 872-9326, (for formal communications intended for entry)

or:

 (703) 746-3515, (for informal or draft communications, please clearly label "PROPOSED" or "DRAFT").

Hilary Gutman
June 27, 2005